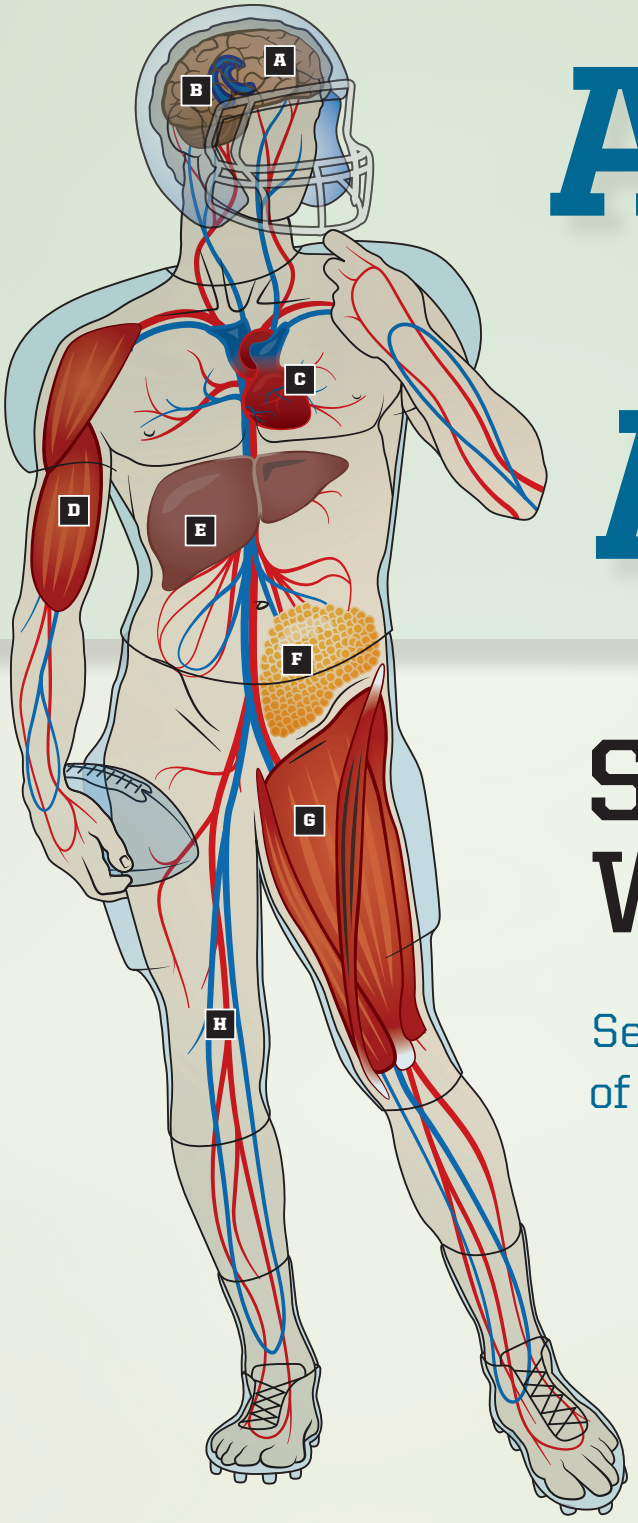
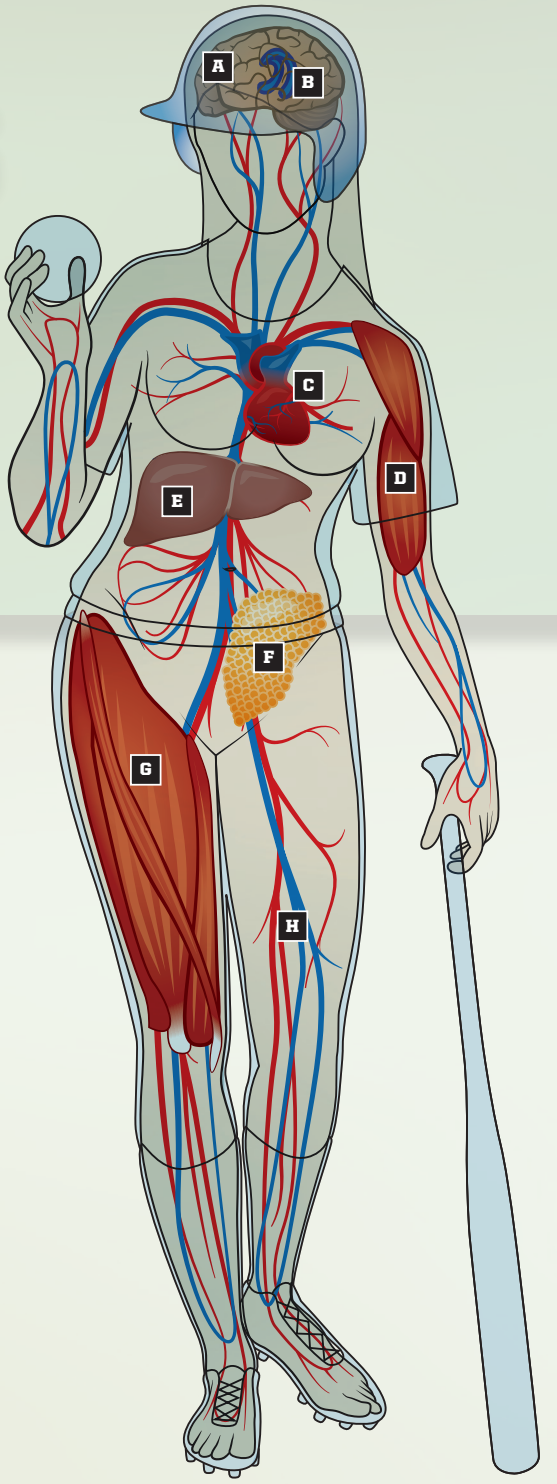
Athletes VS. Alcohol



Staying on the Winning Team

See how alcohol impacts each part of the body by matching the letters to the information on the back



Texans Standing Tall
Together creating healthier and safer communities.

TexansStandingTall.org

Save a Life™
Texas Department of Transportation

UNDER 21 MEANS ZERO.00 ALCOHOL

A. Alcohol Affects Sleep

When a person drinks alcohol, even six hours before going to sleep, they are disturbing their sleep cycle. When alcohol disrupts this sleep cycle, your body will have less energy and your brain will have trouble making new memories and retaining information.[1]

B. Alcohol Hurts Your Brain and Your Memory

Drinking alcohol can harm the brain, especially when the brain is changing during the teen years. One part of the brain, the hippocampus, is especially sensitive to alcohol. The hippocampus is used to form and store new memories so, when the hippocampus is affected by alcohol, an athlete will not be able to remember plays or store new lessons or skills as easily.[1]

C. Alcohol Can Damage Your Heart

Intense exercise increases your heart rate. Drinking alcohol even two days before exercising causes additional stress on the heart and can result in unusual heart rhythms.[2]

D. Alcohol Harms Muscle Growth

Chronic alcohol use can damage long-term performance by causing muscle damage, muscle loss, and muscle weakness. This muscle loss and weakness is known as myopathy. Myopathy can affect the muscles that will harmyour athletic abilities, such as those in your arms and legs and even your heart.[3]

E. Exercising With A Hangover Decreases Performance

When exercising, your body must remove lactic acid. After drinking, a person's liver is working hardest to rid the body of the toxic by-products of alcohol and cannot remove the lactic acid. This causes a feeling of fatigue which lowers athletic performance.[2]

F. Alcohol Increases Fat

Calories from alcohol are stored as fat. Your body works to expel alcohol as quickly as possible since it cannot store it effectively. Your body focuses on ridding itself of alcohol instead of absorbing nutrients and burning fat.[2]

G. Alcohol Hurts Your Performance

Alcohol is linked with a loss of balance, reaction time, memory, and accuracy of fine motor skills.[4] Drinking alcohol leads to slower running and cycling times, weakens the hearts ability to pump, impairs temperature regulation, decreases grip strength and jump height, lowers stamina, and reduces strength and power.[5]

H. Alcohol Causes Dehydration

Alcohol is a diuretic, meaning it makes your kidneys produce more urine, so it can cause your body to become dehydrated. Staying hydrated helps blood flow, which carries oxygen and nutrients to the muscles.[2] When dehydrated, an athlete may experience low energy, low endurance, cramps, muscle pulls, muscle strains, and muscle loss. Full recovery from dehydration can take up to a week![6]

To join Texans StandingTall in preventing underage and risky drinking, visit TexansStandingTall.org or email tst@TexansStandingTall.org

[1] Firth, G., & Manzo, L. G. (2004). Alcohol and athletic performance [Pamphlet]. Retrieved from: https://www.princeton.edu/uhs/pdfs/NCAA%20Alcohol%20and%20Athletic%20Performance.pdf

[2] Drink Aware. (2014, March). Can alcohol affect sports performance. Retrieved from: https://www.drinkaware.co.uk/check-the-facts/health-effects-of-alcohol/healthy-lifestyle/can-alcohol-affect-sports-performance-and-fitness-levels

[3] University Health Center. (2014, July 18). Alcohol and athletic performance. Retrieved from University of Georgia website: https://www.uhs.uga.edu/aod/athletic-performance.html

[4] Vella, L. D. & Cameron-Smith, D. (2010). Alcohol, athletic performance, and recovery. *Nutrients, 2,* 781-789. Retrieved from: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3257708/#B9-nutrients-02-00781

[5] Kozir, L. P., & American College of Sports Medicine. (n.d.). Alcohol and athletic performance [Press release]. Retrieved from: http://www.acsm.org/docs/currentcomments/alcoholandathleticperformance.pdf

[6] UC San Diego Intercollegiate Athletics. (n.d.). Alcohol and athletic performance [Press release]. Retrieved from: http://www.nmnathletics.com/attachments1/507.htm?DB_OEM_ID=5800